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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,119	03/15/2004	Carsten Neumann	NEUMANN C 1	9186
<div>7590 COLLARD &amp; ROE, P.C. 1077 Northern Boulevard Roslyn, NY 11576-1696</div>			<div>EXAMINER WOODALL, NICHOLAS W</div>	
			<div>ART UNIT 3733</div>	<div>PAPER NUMBER</div>
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/801,119	Applicant(s) NEUMANN, CARSTEN	
	Examiner Nicholas Woodall	Art Unit 3733	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 6, 8-15 and 17-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8-15 and 17-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to applicant's amendment received on 09/20/2007.

#### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for attachment formed by a bayonet closure (claim 11) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheets should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 has been amended to include the shape of the joining plate to be star shaped, but the applicant still has claims 14 and 15 dependent from claim 1 stating the joining plate can be a polygon or rounded. The applicant does not provide adequate written description or drawings that show the joining plate having a star shape in combination with a polygon or rounded shape. The examiner will interpret the claims wherein the joining plate can have any of the three configurations for examination purposes.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5, 8, 9, 10, 14-18, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeh (U.S. Publication 2003/0045877).

Regarding claim 1, Yeh discloses a device comprising at least two implant parts. The two implant parts comprising a first implant part, a second implant part, and a joining plate that is capable of being releasably connected with an end of the first implant part or the second implant part (see Figure 1 below). The joining plate further includes an opening capable of being used for releasable attachment of the joining plate, wherein the opening is capable of being located outside the center of gravity of the joining plate. The first implant part and the second implant part are axially adjustable relative to each other along the longitudinal axis of the device. Regarding claim 3, Yeh discloses a device wherein the joining plate projects beyond an outside contour of the device. Regarding claim 5, Yeh discloses a device wherein the shape of the opening is capable of being contoured to an outside contour of the device. Regarding claim 9, Yeh discloses a device wherein the joining plate includes a means for attachment and is capable of being attached to at least one of the at least two implant parts. Regarding claim 10, Yeh discloses a device further comprising a catch seat wherein the means for attachment is formed by a plug-in connection between the joining plate and at least one of the two implant parts. Regarding claim 17, Yeh discloses a device wherein the joining plate includes a passage opening. Regarding claim 23, Yeh discloses a device wherein the joining plate has a side that faces the vertebrae and is capable of being inclined relative to the longitudinal axis of the device. Regarding claim 24, Yeh discloses a device wherein the joining plate has a side that faces the at least two implant parts and is capable of being inclined relative to the longitudinal axis of the device.

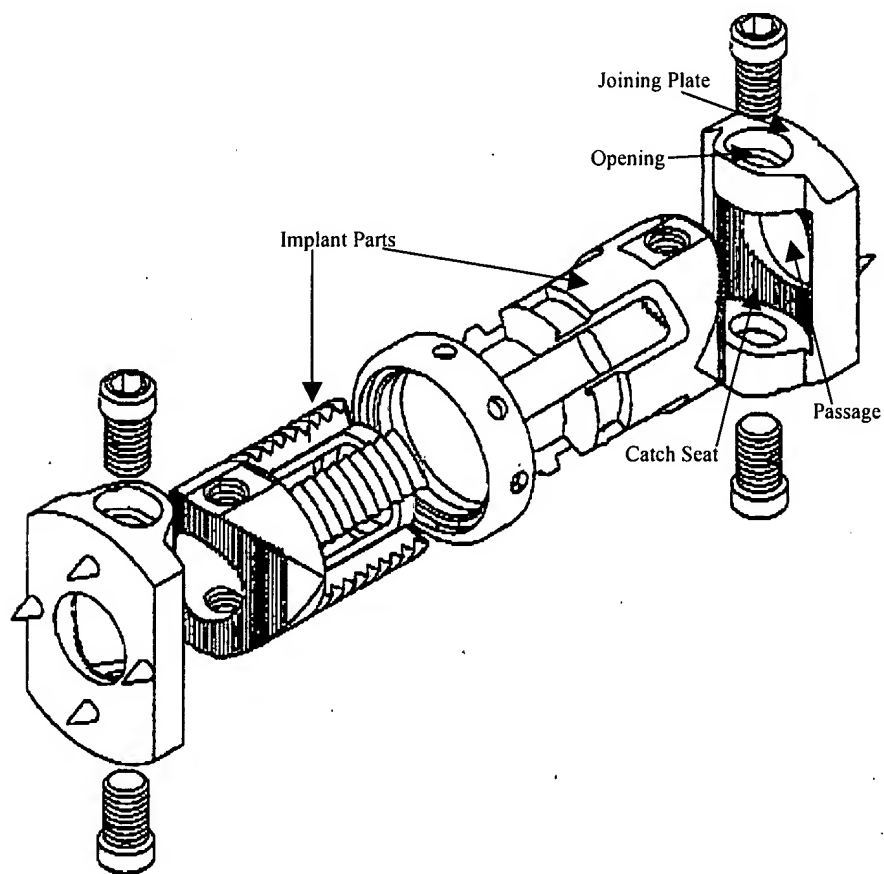
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Regarding claims 2 and 25, Yeh discloses the invention as claimed except for the thickness of the joining plate being between 2% and 30% of the height of at least one of the two implant parts (claim 2) and the joining plate having an angle of incline between 3 degrees and 45 degrees (claim 25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Yeh wherein the joining plate has a thickness between 2% and 30% of the height of at least one of the two implant parts and the joining plate having an angle of incline between 3 degrees and 45 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claims 1, 8, and 14-16, Yeh discloses the invention as claimed except for the surface of the joining plate facing a vertebra is convex shaped (claim 8), the joining plate having a polygon shape (claim 14), the joining plate having a rounded shape (claim 15), and the joining plate having a star shape (claim 16). It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to manufacture the device of Yeh wherein a surface of the joining plate facing a vertebra is convex, the joining plate having a polygon shape, the joining plate having a rounded shape, and the joining plate having a star shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a shape of a joining plate. In re Dailey and Eilers, 149 USPQ 47 (1966).

Regarding claim 18, Yeh discloses the invention as claimed except for the joining plate having a plurality of passage openings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Yeh wherein the joining plate has a plurality of passage openings, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Figure 1



7. Claims 1-6, 9, 10, and 15 are rejected under 35 U.S.C. 103(a) as being anticipated by Daher (U.S. Patent 4,657,550).

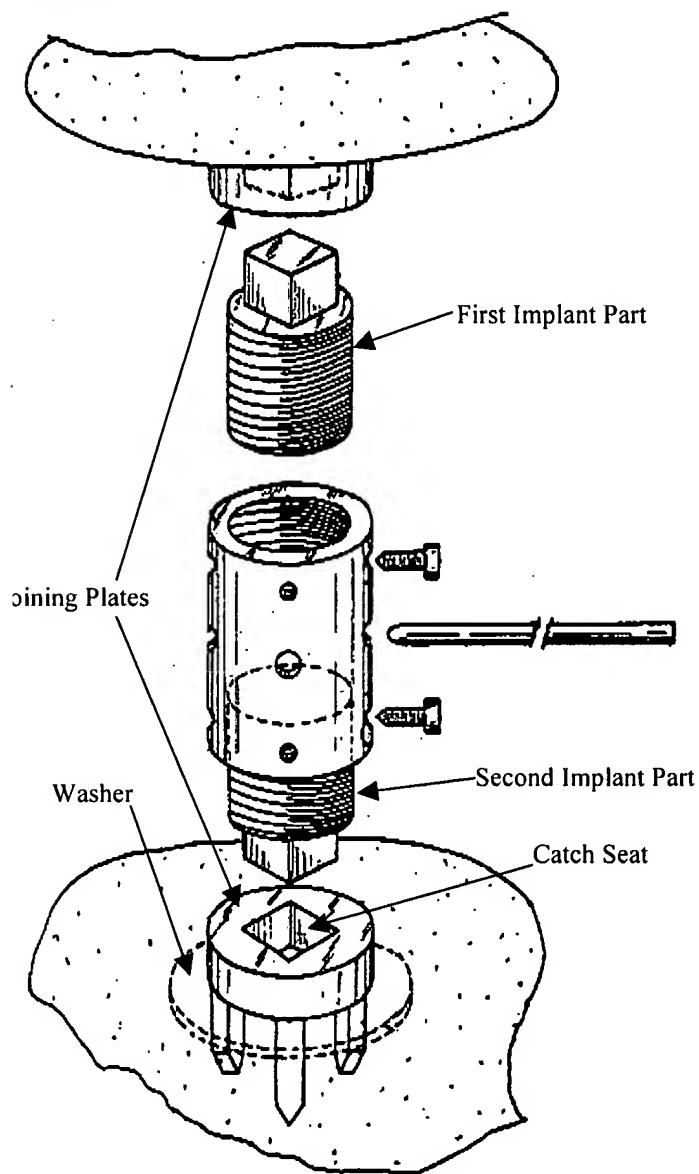
Regarding claim 1, Daher discloses a device comprising at least two implant parts and a joining plate. The at least two implant parts are axially adjustable relative to each other. The joining plate is capable of being releasably connected with a free end with at least one of the two implant parts and is substantially perpendicular relative to the longitudinal axis of the implant (see Figure 2 below). The joining plate further includes an opening capable of being used for releasable attachment of the joining plate, wherein the opening is capable of being located outside the center of gravity of the joining plate. Regarding claim 2, Daher discloses a device wherein the joining plate has a thickness that is between 2% and 30% the height of at least one of the two implant parts. Regarding claim 3, Daher discloses a device wherein the joining plate includes a washer that projects beyond the outside contour of the implant parts. Regarding claim 4, Daher discloses a device further comprising a means for releasable attachment of the joining plate wherein the means is an opening formed in the joining plate. Regarding claim 5, Daher discloses a device wherein the shape of the opening in the joining plate is adapted to the outside contour of the implant parts. Regarding claim 6, Daher discloses a device wherein the opening in the joining plate is positioned in the center of gravity of the joining plate. Regarding claim 9, Daher discloses a device wherein there are two joining plates which have a means for attachment that is an opening in the joining plates that are attached to at least one of the implant parts. Regarding claim 10, Daher discloses a device further comprising a catch seat that is part of the plug-in connection that forms the attachment means between the joining

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plate and at least one of the implant parts. Regarding claim 15, Daher discloses a device wherein the joining plate is circular shaped.

Further regarding claim 1, Daher discloses the invention as claimed except for the joining plate having a star shape. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to manufacture the device of Daher wherein the joining plate having a star shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a shape of a joining plate. In re Dailey and Eilers, 149 USPQ 47 (1966).

Figure 2



8. Claims 1, 2, 3, 5, 8-10, 14-18, 23, 24, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paponneau (U.S. Publication 2003/0176925) in view of Yeh (U.S. Publication 2003/0045877).

Regarding claim 1, Paponneau discloses a device comprising at least two implant parts. The two implant parts comprising a first implant part and a joining plate that is capable of being releasably connected with an end of the first implant part. The joining plate further includes an opening capable of being used for releasable attachment of the joining plate, wherein the opening is capable of being located outside the center of gravity of the joining plate. Regarding claim 3, Paponneau discloses a device wherein the joining plate projects beyond an outside contour of the device. Regarding claim 5, Paponneau discloses a device wherein the shape of the opening is capable of being contoured to an outside contour of the device. Regarding claim 9, Paponneau discloses a device wherein the joining plate includes a means for attachment and is capable of being attached to at least one of the at least two implant parts. Regarding claim 10, Paponneau discloses a device further comprising a catch seat wherein the means for attachment is formed by a plug-in connection between the joining plate and at least one of the two implant parts. Regarding claim 17, Paponneau discloses a device wherein the joining plate includes a passage opening. Regarding claim 18, Paponneau discloses a device wherein the joining plate includes a plurality of passage openings. Regarding claim 23, Paponneau discloses a device wherein the joining plate has a side that faces the vertebrae and is capable of being inclined relative to the longitudinal axis of the device. Regarding claim 24, Paponneau discloses a device wherein the joining plate has a side that faces the at least two implant parts and is capable of being inclined relative to the longitudinal axis of the device. Regarding claim 26, Paponneau discloses a device wherein the joining plate has a rotational

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position that can be fixed about a longitudinal axis of the device. Paponneau fails to disclose the device further comprising a second implant part. Yeh teaches a device comprising a second implant part in order to allow the device to be axially adjustable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Paponneau to further include a second implant part in view of Yeh in order to allow the device to be axially adjustable.

Regarding claims 2, 25, and 27, the combination of Paponneau and Yeh disclose the invention as claimed except for the thickness of the joining plate being between 2% and 30% of the height of at least one of the two implant parts (claim 2), the joining plate having an angle of incline between 3 degrees and 45 degrees (claim 25), and the catch seats of the device being spaced at widths between 10 degrees to 45 degrees (claim 27). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Paponneau modified by Yeh wherein the joining plate has a thickness between 2% and 30% of the height of at least one of the two implant parts, the joining plate having an angle of incline between 3 degrees and 45 degrees, and the catch seats of the device being spaced at widths between 10 degrees to 45 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claims 1, 8, 14-16, and 28, the combination of Paponneau and Yeh disclose the invention as claimed except for the surface of the joining plate facing a vertebra is convex shaped (claim 8), the joining plate having a polygon shape (claim

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14), the joining plate having a rounded shape (claim 15), and the joining plate having a star shape (claim 16). It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to manufacture the device of Paponneau modified by Yeh wherein a surface of the joining plate facing a vertebra is convex, the joining plate having a polygon shape, the joining late having a rounded shape, and the joining plate having a star shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a shape of a joining plate. In re Dailey and Eilers, 149 USPQ 47 (1966).

Regarding claim 28, the combination of Paponneau and Yeh disclose the invention as claimed except for the catch seats of the device being formed on the free ends of the implant parts. It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Paponneau modified by Yeh wherein the catch seats of the device are formed on the free ends of the implant parts, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

9. Claims 19-22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paponneau (U.S. Publication 2003/0176925) in view of Yeh (U.S. Publication 2003/0045877) further in view of Strnad (U.S. Patent 6,296,665).

Regarding claims 19 and 29, the combination of Paponneau and Yeh disclose the invention as claimed except for the joining plate having at least one of the plurality of passage openings extending to an outer edge of the joining plate. Strand teaches a

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device comprising a joining plate wherein at least one of the plurality of passage openings extends to an outer edge of the joining plate in order to facilitate bone growth (column 3 lines 62-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Paponneau modified by Yeh wherein the at least one of the passage openings extends to an outer edge of the joining plate in view of Strnad in order to facilitate bone growth.

Regarding claim 20, the combination of Paponneau, Yeh, and Strnad disclose a device wherein the joining plate has a plurality of plate ridges disposed around the plurality of passage openings. Regarding claim 21, the combination of Paponneau, Yeh, and Strnad disclose a device wherein the plurality of plate ridges are coupled to each other at a free end to form an edge of the joining plate. Regarding claim 22, the combination of Paponneau, Yeh, and Strnad disclose a device disclose a device further comprising a rotatable threaded ring coupled to the second implant part, wherein the first implant part has threads that engage with a set of threads in the rotatable threaded ring, wherein the rotatable ring has a bevel wheel gear.

Regarding claim 29, the combination of Paponneau, Yeh, and Strnad disclose the invention as claimed except the joining plate having a star shape. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to manufacture the device of Paponneau modified by Yeh further modified by Strnad wherein the joining plate having a star shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious

for the purpose of providing a shape of a joining plate. In re Dailey and Eilers, 149 USPQ 47 (1966).

10. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daher (U.S. Patent 4,657,550) in view of Bucher (U.S. Patent 6,171,059).

Regarding claims 12 and 13, Daher discloses the invention as claimed except for the means for attachment further comprises a groove in one element and a spring mounted in a groove in a second element. Bucher teaches a means for attachment comprising a groove in one element and a spring mounted in a groove in a second element in order to provide a quick and easy means for attachment (column 5 lines 43-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Daher wherein the means for attachment further comprises a groove in one element and a spring mounted in a groove in a second element in view of Bucher in order to a quick and easy means for attachment.

11. Claims 1, 6, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry (U.S. Publication 2003/0181980) in view of Yeh (U.S. Publication 2003/0045877).

Regarding claim 1, Berry discloses a device comprising at least two implant parts. The two implant parts comprising a first implant part and a joining plate that is capable of being releasably connected with an end of the first implant part. The joining plate further includes an opening capable of being used for releasable attachment of the joining plate, wherein the opening is capable of being located outside the center of

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gravity of the joining plate. Regarding claim 6, Berry discloses a device wherein the opening is positioned in the center of gravity of the joining plate. Regarding claim 9, Berry discloses a device wherein the joining plate includes a means for attachment and is capable of being attached to at least one of the at least two implant parts. Regarding claim 10, Berry discloses a device further comprising a catch seat wherein the means for attachment is formed by a plug-in connection between the joining plate and at least one of the two implant parts. Regarding claim 11, Berry discloses a device wherein the means for attachment can be a bayonet means. Berry fails to disclose the device further comprising a second implant part. Yeh teaches a device comprising a second implant part in order to allow the device to be axially adjustable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Berry to further include a second implant part in view of Yeh in order to allow the device to be axially adjustable.

Regarding claim 1, Berry discloses the invention as claimed except the joining plate having a star shape. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to manufacture the device of Berry wherein the joining plate having a star shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a shape of a joining plate. In re Dailey and Eilers, 149 USPQ 47 (1966)

***Response to Arguments***

12. Applicant's arguments filed 09/20/2007 have been fully considered but they are not persuasive. The applicant's argument that the star-shaped configuration of the joining plate is not an obvious shape is not persuasive. First, the examiner would like to note that the applicant has provided numerous claims regarding the shape of the joining plate, i.e. claims 14 and 15, which are considered evidence that the shape of the joining plate is not novel and is one of a numerous shapes or configurations a person of ordinary skill in the art would find obvious. The applicant has discussed a problem which the star shaped shape helps solve, see page 7 second paragraph of the specification, wherein the star shape **may help create an osseous connection** between the vertebrae. However, the specification also states, "Joining plate 5, is configured so that there are many different possibilities of variation to take the actual conditions present in a particular operation into account. Fig. 10, similar to Fig. 13, shows an essentially triangular configuration of joining plate 5, with rounded corners, while Fig. 12 shows a rectangular configuration. In this case, any polygon can be implemented, to the extend that this is desirable for anatomical or operative reasons (page 16 paragraph 2 of the specification)." Therefore, the applicant discloses that any shape is usable and that the shape is not critical to the functionality of the device. Therefore, the shape is one of numerous shapes or configurations a person of ordinary skill in the art would find obvious. The new grounds of rejection were necessitated by amendment making this office action **FINAL**.

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***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Woodall whose telephone number is 571-272-5204. The examiner can normally be reached on Monday to Friday 8:00 to 5:30 EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NWWW



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SUPERVISORY PATENT EXAMINER